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## 1.1 GUIDELINES SUMMARY AND PURPOSE

The purpose of these administrative landscaping guidelines is to:

- 1. Clarify Marysville Municipal Code requirements related to landscaping and tree retention.
- 2. Provide examples of planting patterns and spacing guidelines.
- 3. Provide recommended plant species for trees and shrubs.

These guidelines are provided to give helpful information in an informal and easy form that can be easily amended by the City Planning Department. The following planting guidelines and standards should be followed in developing a final landscape plan. The plan should encourage a low maintenance, quality design, with drought resistant plants and minimal grass area is encouraged to promote water conservation.

#### 2.1 DEFINITIONS

"Berm" means an earthen mound designed to provide visual interest, screen undesirable views, and/or decrease noise.

"Buffer" means a combination of physical space and vertical elements, such as plants, berms, fences or walls, the purpose of which is to separate and screen incompatible land uses from each other.

"Caliper" means a measuring device and term used to identify the diameter of tree trunks.

"Crown" means the top portion of a berm or tree, including the foliage and branches.

"Deciduous" means a plant species with foliage that is shed annually.

"Evergreen" means a plant species with foliage that persists and remains green year round.

"Ground cover" means low-growing plants, typically less than 24 inches at maturity, other than turf grasses.

"Hedge" means a landscape barrier consisting of a continuous, dense planting of shrubs.

"Opaque" means visually impenetrable.

"Screen" means a method of reducing the impact of noise and unsightly visual intrusion with less offensive or more harmonious elements, such as plants, berms, fences, walls, or any appropriate combination thereof.

"Shade tree" means a deciduous tree planted primarily for its high crown of foliage or overhead canopy.

"Shrub" means a woody plant, smaller than a tree, consisting of several small stems from the ground or small branches near the ground; may be deciduous or evergreen.

#### 3.1 BUFFER TYPES AND PLANTING STANDARDS

These standards are intended to provide guidance in designing a landscape plan meeting the intent of MMC Section 22C.120.110, which identifies Type L1, L2, L3, L4 and L5 landscapes. Alternative landscaping designs and plantings may be proposed to meet the intent of the screen type.

**Type L1 – "Opaque Screen"**: A screen that is opaque from the ground to a height of at least six feet, with intermittent visual obstructions from the opaque portion to a height of at least 20 feet. An opaque screen is intended to exclude all visual contact between uses and to create a strong impression of spatial separation. The opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis on the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The opaque portion of the screen must be opaque in all seasons of the year. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than 10 feet wide. The portion of intermittent visual obstructions may contain deciduous plants.

#### Type L1 Planting Standards:

- 1. Type L1 landscaping is a "full screen" that functions as a visual barrier. This landscaping is typically found between residential and non-residential areas, or other incompatible land uses.
- 2. General guidelines for Type L1 landscaping:
  - a. A mix of primarily evergreen trees and shrubs placed to form a continuous screen;
  - b. At least 70 percent evergreen trees;
  - c. Evergreen trees spaced no more than 15 feet on center;
  - d. Deciduous trees spaced no more than 20 feet on center;
  - e. Evergreen shrubs spaced no more than four feet apart; and
  - f. Ground cover.

**Type L2 – "Semi-Opaque Screen"**: A screen that is opaque from the ground to a height of three feet, with intermittent visual obstruction from above the opaque portion to a height of at least 20 feet. The semi-opaque screen is intended to partially block visual contact between uses and to create a strong impression of the separation of spaces. The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than 10 feet wide. The zone of intermittent visual obstruction may contain deciduous plants.

## **Type L2 Planting Standards:**

- 1. Type L2 landscaping is a "filtered screen" that functions as a visual separator. This landscaping is typically found between commercial and multiple family uses; and to screen industrial uses from principle arterials (I-5 and SR9);
- 2. General guidelines for Type L2 landscaping:

- a. A mix of evergreen and deciduous trees and shrubs spaced to create a filtered screen;
- b. At least 50 percent deciduous trees and at least 30 percent evergreen trees;
- c. Evergreen trees spaced no more than 15 feet on center;
- d. Deciduous trees spaced no more than 20 feet on center;
- e. Shrubs spaced no more than five feet apart; and
- f. Ground cover.

**Type L3 – "Broken Screen"**: A screen composed of intermittent visual obstructions from the ground to a height of at least 20 feet. The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces. It may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The screen may contain deciduous plants.

#### Type L3 Planting Standards:

- 1. Type L3 landscaping is a "see-through buffer" that functions as a partial visual separator to soften the appearance of parking areas and building elevations. This landscaping is typically found along street frontages;
- 2. General guidelines for Type L3 landscaping:
  - a. A mix of evergreen and/or deciduous trees spaced to create a continuous canopy;
  - b. At least 70 percent deciduous trees;
  - c. Trees spaced no more than 25 feet on center;
  - d. Shrubs, that do not exceed a height of four feet, spaced no more than four feet apart; and
  - e. Ground cover.

**Type L4 – "Parking Area Landscaping":** Landscaping that provides shade and visual relief while maintaining clear sight lines within parking areas. Planting areas should contain a mixture of evergreen and deciduous trees, shrubs and groundcover in planting islands or strips having an area of at least 120 square feet and narrow dimension of no less than five feet.

## **Type L4 Planting Standards:**

- 1. Type L4 landscaping is "parking area landscaping" that provides shade and visual relief while maintaining clear sight lines within parking areas;
- 2. General guidelines for Type L4 landscaping:
  - a. A minimum of one canopy-type deciduous or evergreen trees per landscape island, or strip, along with evergreen shrubs and ground covers;
  - b. Shrubs that do not exceed a height of four feet;
  - c. Plantings contained in planting islands or strips having an area of at least 120 square feet and with a narrow dimension of no less than five feet;
  - d. Ground cover; and
  - e. At least 90 percent of the trees should be deciduous.

**Type L5 – "Stormwater Retention/Detention Landscaping".** Landscaping that provides visual relief through a reduction in sight lines of pond features visible from a public right-of-way. Landscaping shall include all visible perimeter areas including side slopes and benches visible from said right of way. Plantings must be a minimum of five feet in width along adjacent right of way and may incorporate no more than 30 percent deciduous plantings due to maintenance and pond performance constraints. Landscaped areas shall be on the exterior of any walls or fences, provided that this requirement shall not apply to side slopes or benches with the fenced area.

### Type L5 planting standards:

- 1. Type L5 landscaping is a "stormwater detention/retention landscaping treatment" that provides visual relief from storm water design features;
- 2. General guidelines for Type L5 landscaping:
  - a. Evergreen and deciduous trees, shrubs and ground covers planted along right-of-way, and/or within hillside ponds or dual use ponds;
  - b. Plantings contained along right of way must have a narrow dimension of no less than five feet;
  - c. Ground cover;
  - d. Shrub spacing no more than three feet on center; and
  - e. At least 70 percent of the trees and shrubs should be evergreen.

#### 4.1 PLANTING AND MAINTENANCE GUIDELINES

#### Trees and Vegetation:

- 1. Landscape materials should be hardy species native to the coastal region of the Pacific Northwest, or that are adaptable to local conditions, easily maintained, and drought tolerant. Use of native plants is strongly encouraged.
- 2. The majority of new landscaping materials should consist of drought-tolerant species, except where site conditions within the required landscape areas assure adequate moisture for growth.
- 3. Existing vegetation should be incorporated into the site design, and may be used to augment new plantings to meet the standards of this chapter.
- 4. Deciduous trees should have a caliper of at least two inches at the time of planting. The caliper may be averaged at the base, but no individual tree should have a caliper of less than 1.5 inches.
- 5. Evergreen trees should be at least six feet in height measured from treetop to the ground at the time of planting.
- 6. When the width of a Type L1 or L2 landscape strip is 20 feet or greater, the required trees should be staggered in two or more rows.
- 7. Shrubs should be:
  - a. Two-gallon size at time of planting in Type L2, L3 and L4 landscaping,
  - b. At least 24 inches in height at the time of planting for Type L1 landscaping, and
  - c. Maintained at a height not exceeding four feet when located in Type L3 or L4 landscaping.
  - d. Alternative plant sizes of particular species may be approved by the City if documentation concerning the effectiveness of the shrubs is submitted with the landscape plan.

- 8. Ground covers should be planted and spaced to result in total coverage of the required landscape area within three years as follows:
  - a. Four-inch pots at 18-inches on center, or
  - b. One-gallon or greater sized containers at 24-inches on center.
  - c. Alternative spacing of particular species may be approved by the City if documentation concerning the effectiveness of the groundcover is submitted with the landscape plan.
- 9. Grass may be used as ground cover in landscape areas provided that the grass area:
  - a. Constitutes no more than seventy-five (75) percent of the required ground cover; and
  - b. Is at least five feet wide at the smallest dimension.
- 10. Grass and ground cover areas should contain at least two inches of composted organic material at finish grade.

#### **Fences and Berms:**

- 11. All fences should be placed on the inward side of any required landscaping when adjacent to a public or private street.
- 12. Berms should not exceed a slope of two horizontal feet to one vertical foot (2:1).

### Soils and Mulching:

- 13. Existing soils should be augmented with a two-inch layer of fully composted organic material roto-tilled a minimum of six inches deep.
- 14. Landscape areas should be covered with at least two inches of mulch to minimize evaporation.
  Mulch should consist of materials such as yard waste, sawdust and/or manure that is fully composted.

#### **General Landscape Design:**

- 15. Drought-tolerant and non-drought tolerant species should be grouped separately.
- 16. Landscaping plans should provide unity of design through repetition of plants and coordination with adjacent developments.

## **Landscape Design for Parking Areas:**

- 17. There should be one tree planted for each one-hundred twenty (120) square feet of landscape area or fraction thereof. There should be at least one tree for each landscape area which is less than 120 square feet in area.
- 18. The design for parking areas should include canopy trees to provide shade and break up expanses of asphalt. No parking stall should be located more than 45 feet from a landscape islands or medians. All landscaping must be located between parking stalls, at the end of parking columns, or between stalls and the property line.
- 19. Interior landscaping is required for parking lots containing more than 20 spaces at a rate of 10 percent of the interior parking area. No landscaping which occurs between the parking lot and a building or recreation area should be considered in the satisfaction of these requirements. Parking lots containing less than 20 parking spaces need provide only perimeter screening to satisfy the 10 percent area requirements. The interior parking area does not include any required buffers along street frontages or property lines. (MMC Section 22C.120.130)

- 20. All landscaped areas should be protected by wheel stops or curbing, or be of sufficient width to prevent damage to plants by overhanging vehicles.
- 21. Vegetation planted at aisle ends and lane intersections should be planted and maintained to prevent the obstruction of driver visibility of pedestrians and other vehicles.

### Interior Site Landscaping and the Use of Architectural Features:

- 22. Interior site landscaping is required to define pedestrian ways, enclose outdoor gathering and seating areas, and reduce building mass.
- 23. Architectural features such as low walls, fountains, and sculptures may be used in places where planting areas are limited or restricted.
- 24. Project entrances should be enhanced through changes in paving materials such as brick pavers, textured and colored concrete, providing entry structures and unity in planting of trees and shrubs.
- 25. Open storm water detention facilities should be incorporated into project landscaping and open space.
- 26. Where branches may interfere with pedestrians or vehicles in the right-of-way, trees should have a clear trunk area of seven feet (7') above the ground for pedestrian paths, eight feet (8') above bicycle lanes, fifteen feet (15') above arterials, and fourteen feet (14') above all other roads.
- 27. Spacing of street trees should be up to forty (40) feet on arterials and up to thirty (30) feet on collector streets.
- 28. In the downtown planning area, and Mixed Use zones, a combination of street trees, lamp posts, planter boxes, hanging baskets or other landscaping or street furniture may be substituted for street trees upon approval by the Planning Director.
- 29. Landscaping may be placed within City of Marysville street rights-of-way subject to the City's street design standards with the permission of the City of Marysville Department of Public Works.
- 30. For single family subdivisions, planned residential developments, and short subdivisions, retention of native trees and wooded areas is considered a priority over re-vegetation. For developments which are (1) proposed on lands which have been cleared of significant wooded areas within three years preceding the date of application, or (2) proposed on lands abutting an identified streetscape arterial in the Marysville Comprehensive Plan, a landscaping plan will be required to provide for either re-vegetation or streetscape. Where appropriate, street trees will be incorporated into the plan using the following standards:
  - a. Trees should be planted at the rate of one tree for every:
    - i. Fifty feet of frontage along a neighborhood collector street; and
    - ii. Forty feet of frontage along an arterial street.
  - b. The trees should be:
    - i. Located within the street right-of-way if permitted by the custodial state or local agency;
    - ii. No more than 20 feet from the street right-of-way line when located within a lot;
    - iii. Maintained by the abutting landowner if located within the right-of-way, unless part of a City maintenance program; and

- iv. A species approved by the City.
- c. The trees may be spaced at irregular intervals in order to accommodate sight distance requirements for driveways and intersections.
- d. Developments which are adjacent to an arterial or collector, but do not take access onto said street, should provide sufficient planting area between the back of side walk and the proposed fence line of the development. This area should be at least four (4) feet in width and may be a combination of right-of-way and landscape easements.

# Irrigation:

- 31. All landscaped areas shall be provided with an irrigation system or a readily available water supply with at least one outlet located within 50 feet of all plant material;
- 32. Areas of undisturbed existing vegetation or areas where existing site conditions assure adequate soil moisture for growth within the required landscape area should have temporary irrigation systems only as required to sustain new plantings and should be determined on a case-by-case basis by the City; and
- 33. Areas of undisturbed existing vegetation, low areas with existing high soil moisture conditions, or landscape areas consisting of drought-tolerant vegetation should not have permanent irrigation systems. Permanent irrigation systems may be permitted within all other required landscape areas, provided such systems should be designed by a landscape architect or engineer.

## Landscaping Design for Dual Use Detention/Retention ponds:

- 34. All fences for City-maintained pond facilities must incorporate green or black vinyl coated chain link fence fabric, fence posts, and all associated fence appurtenances. Vinyl or wood slats shall not be used in City maintained chain link fences because they obstruct visibility into the City facilities (a desired security feature) and add to the maintenance requirements for the fences.
- 35. Use of un-textured ecology blocks/reinforced concrete shall not be allowed above permanent pond water surfaces. Developments shall instead incorporate textured ecology blocks, textured sprayed concrete, and decorative rockery/landscaping stone upon steep-sloped pond edges. Slopes greater than 20 feet in length (horizontal) shall also incorporate a tiered or benched design element to allow for overhanging decorative plantings to further reduce obtrusive sight lines.

# Landscaping Design in Ponds as Dual Use Stormwater Retention/Detention and/or Recreation Facilities:

- 36. The facility should be designed with emphasis as a recreation area not a stormwater control structure. The majority of the storm water retention/detention tract shall be designed as usable recreation area.
- 37. Control structures shall not be prominently placed. Care should be taken to blend them into the perimeter of the recreation area.
- 38. Ponds used as recreation areas shall have a curvilinear design with a shallow water safety bench.

# 5.1 RECOMMENDED TREES AND SHRUBS

# PLANTS THAT GROW WELL IN WET PLACES

SCIENTIFIC NAME	COMMON NAME
TREES	
Acer rubrum	Red Maple
Alnus rhombifolia	White Alder
Betula nigra	River or Red Birch
Fraxinus latifolia	Oregon Ash
Nyssa sylvatica	Sour Gum
Taxodium distichum	Bald Cypress
SHRUBS	
Aronia arbutifolia	Red Chockberry
Chaenomeles	Flowering Quince
Cornus stolonifera	Red Twig Dogwood
Kalmia polifolia	Pale Laurel
Leucothoe davisiae	Sierra Laurel
Ligustrum	Privet
Spiraea douglasii	Western Spirea

## **PLANTS THAT GROW WELL IN DRY PLACES**

SCIENTIFIC NAME	COMMON NAME
TREES	
Cotinus coggygria	Smoke Tree
Cupressus glabra	Smooth Arizona Cypress
Pinus species	Pine Trees
Robinia pseudoacacia	Locust
Sorbus aucuparia	European Mountain Ash
SHRUBS	
Acacia	Acacia
Arbutus unedo	Strawberry Tree
Arctostaphylos	Manzanita
Artemisia	varies
Atriplex canescens	Saltbrush
Berberis mentorensis	Barberry
Buddleia alternifolia	Butterfly bush
Caragana arborescens	Seberian Pea-shrub
Cercis ocidentalis	Red Bud
Cistus ladaniferus maculates	Crimson-spot Rockrose
Cistus villosus	Rockrose variety
Cotoneaster	Cotoneaster
Cytisus	Broom species
Dendromecon	Bush Poppy
Garrya	Silktassel
Helianthemum nummularium	Sunrose
Heteromeles arbutifolia	Toyon, Christmas Berry
Hypericum calycinum	St. Johnswort
Juniperus	Junipers

Lagerstroemia indica	Crape Myrtle
Lavandula spica	Lavender
Mahonia aquifolium	Mahonia
Pyracantha	Pyracantha
Rhamnus alaternus	Italian Buckthorn
Rosmarinus officinalis	Rosemary
Rosmarinus officinalis "Prostratus"	Dwarf Rosemary
Santolina	Lavender cotton

# 6.1 RECOMMENDED STREET TREES

## **SMALL TREES**

Trees not exceeding 25 to 30 feet in height, appropriate for use under power lines

Acer platanoides "Crimson Sentry"  Carpinus betulus "Fastigiata"	Crimson Sentry Maple Pyramidal European Hornbeam Autumn Brilliance Serviceberry
	Hornbeam Autumn Brilliance
Amalanahian anandiflana "Autuman	
Amelanchier grandiflora "Autumn Brilliance"	JCI VICCOCITY
Malus "Sugar Tyme"	Sugar Tyme Crabapple
Prunus cerisifera "Krauter Vesuvius"	Krauter Vesuvius Flowering Plum
Prunus cerisifera "Thundercloud"	Thundercloud Flowering Plum
Prunus serrulate "Amanagwa"	Amanagawa Flowering Plum
Sorbus tianshanica "Red Cascade"	Red Cascade Mountain Ash
Prunus virginia "Canada Red"	Canada Red Chokeberry
Carpinus caroliniana	American Hornbeam
Acer palmatum	Green Japanese Maple
Cornus kousa chinensis	Chinese Kousa Dogwood
Styrax japonicas	Japanese Snowbell
Parrotia persica	Persian Parrotia
Malus "Prairie Fire"	Prairie Fire Crabapple
Laburnum x watereri "Vossii"	Goldenchain Vossi
Crataegus x lavallei	Lavalle Hawthorn
Fraxinus excelsior "Globosa"	Globe Ash

# **MEDIUM TREES**

Trees not exceeding 40 feet in height, appropriate for street without power lines

SCIENTIFIC NAME	COMMON NAME
Acer platannoides "Columnarbroad"	Parkway Columnar Maple
Acer rubrum "Bowhall"	Bowhall Red Maple
Fraxinus oxycarpa "Raywood"	Raywood Ash
Liquidambar styraciflua "Worplesdom"	Worplesdon Sweetgum
Gleditsia triancanthos "Skyline"	Skyline Honeylocust
Prunus sargentii "Comunaris"	Columnar Sargent Cherry
Prunus serrulata "Kwanzan"	Kwanzan Cherry
Koelreuteria paniculata	Goldenrain Tree
Sorbus alnifolia	Korean Mountain Ash

Pyrus calleryana "Chanticleer"	Chanticleer Callery Pear (same as Cleveland Select and Stone Hill)
Quercus accutissima	Sawtooth Oak
Zelkova serrata "Village Green"	Village Green Zelkova
Ostrya virginiana	Amercian Hophornbeam
Acer rubrum "Frankred"	Red Sunset Maple
Fraxinus pennsylvanic "Patmore"	Patmore Ash
Acer compestre	Hedge Maple
Aesculus x carnea "Briotii"	Red Horsechestnut

# **LARGE TREES**

Trees potentially reaching 50 feet or more needing large planting strips to fully develop

SCIENTIFIC NAME	COMMON NAME
Fagus sylvatica "Riversii"	Rivers Purple European Beech
Acer x freemanii "Jeffersred"	Autumn Blaze Maple
Cercidiphyllum japonicum	Katsura Tree
Quercus rubra	Red Oak
Zelkova serrata "Green Vase"	Green Vase Zelkova
Quercus robur	English Oak
Metasequoia glytrostoboides	Dawn Redwood
Magnolia cempbellii	Oriental Magnolia
Fagus sylvatica	European Beech
Platanus x acerifolia	London Plane Tree